



NOAA's 406 MHz Beacon Registration Database (RGDB)

www.beaconregistration.noaa.gov

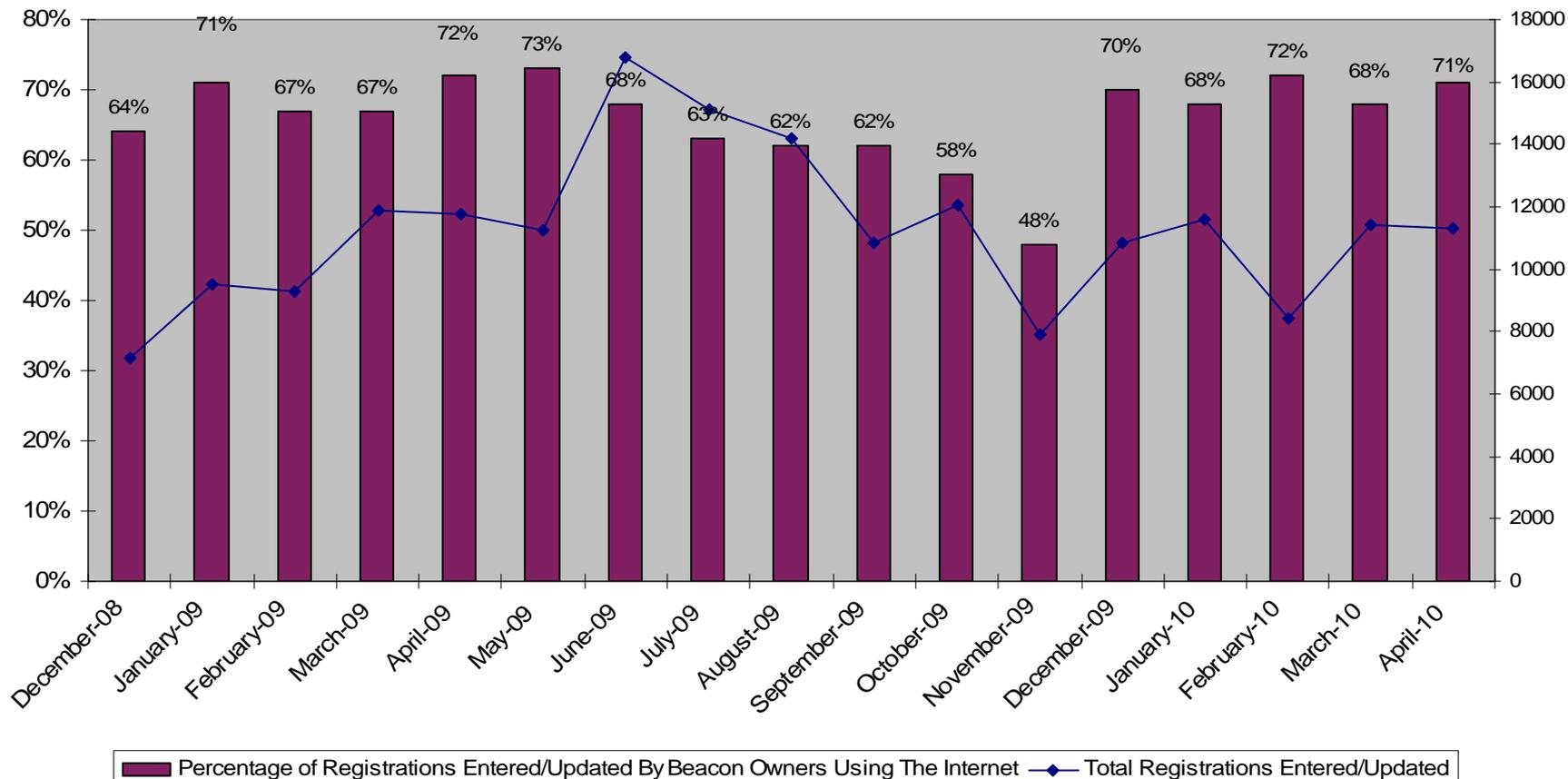
NOAA SARSAT PROGRAM



Online Usage Statistics



**Registrations Entered/Updated
For Periods December '08 to April '10**

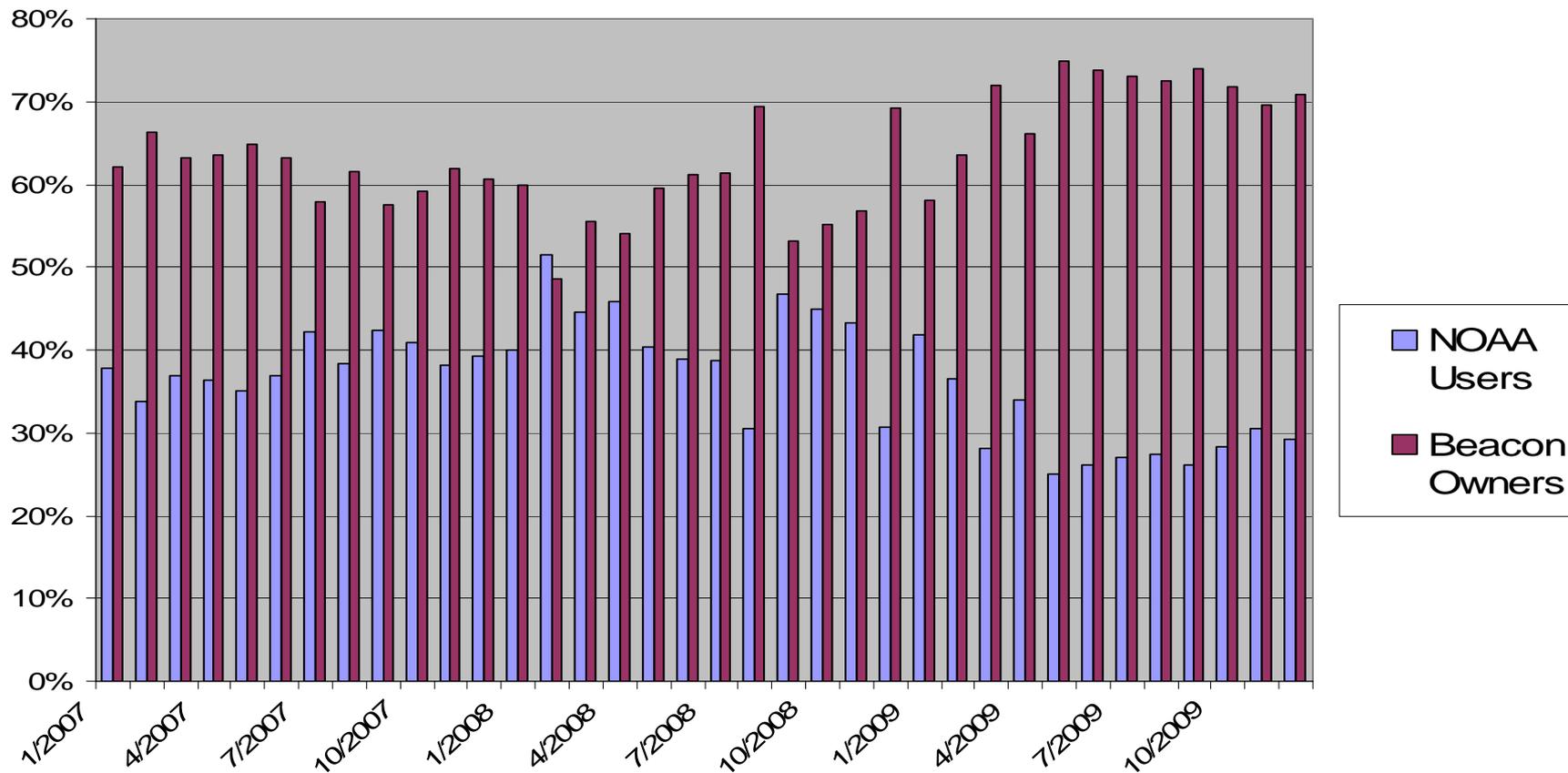




Initial Registrations By Users



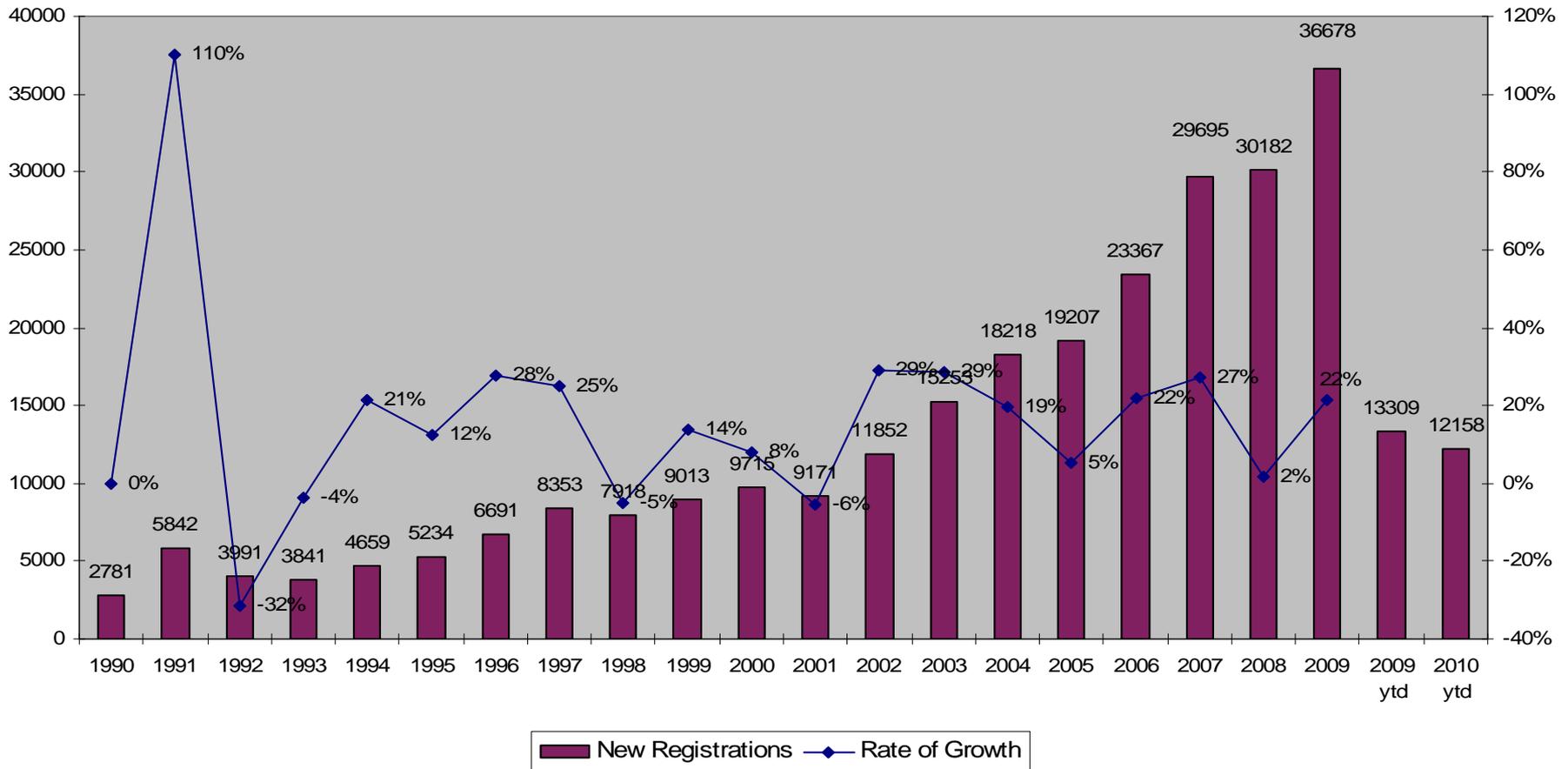
New Registrations Entries





Analysis of Current RGDB

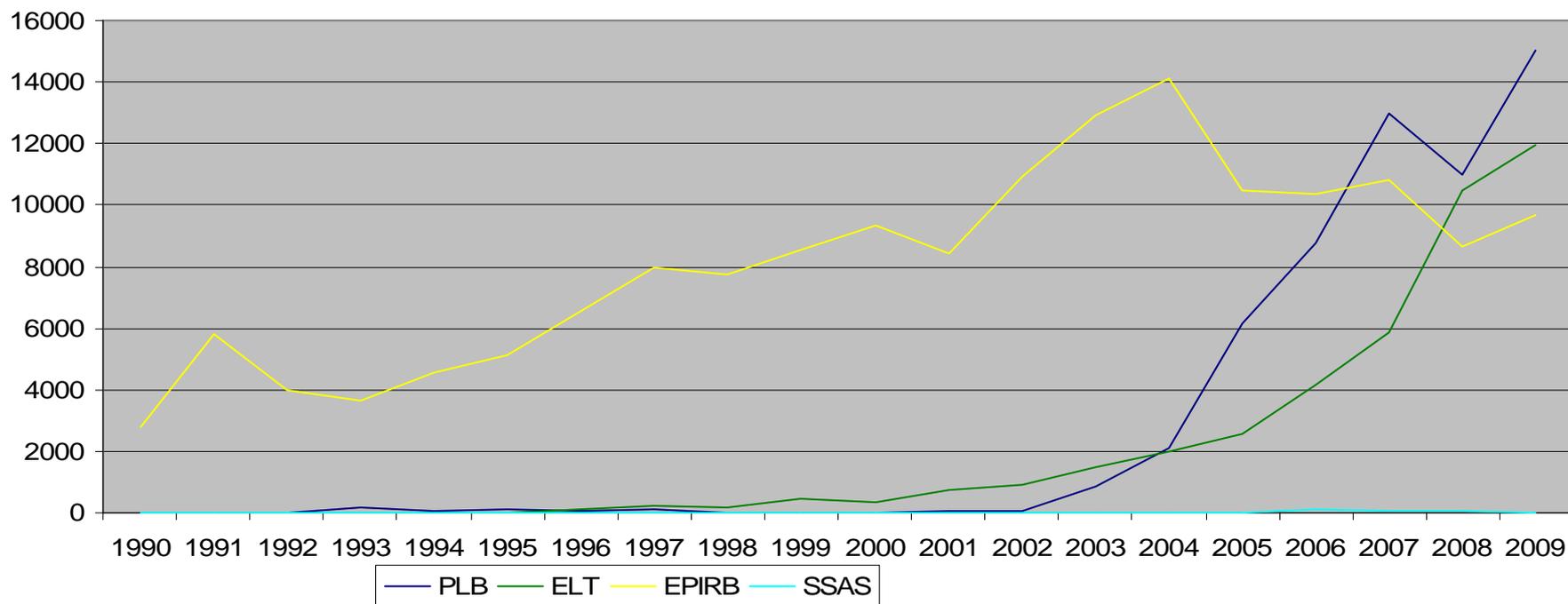
New Registrations As Of
April, 2010

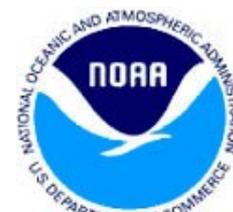




Analysis of Current RGDB

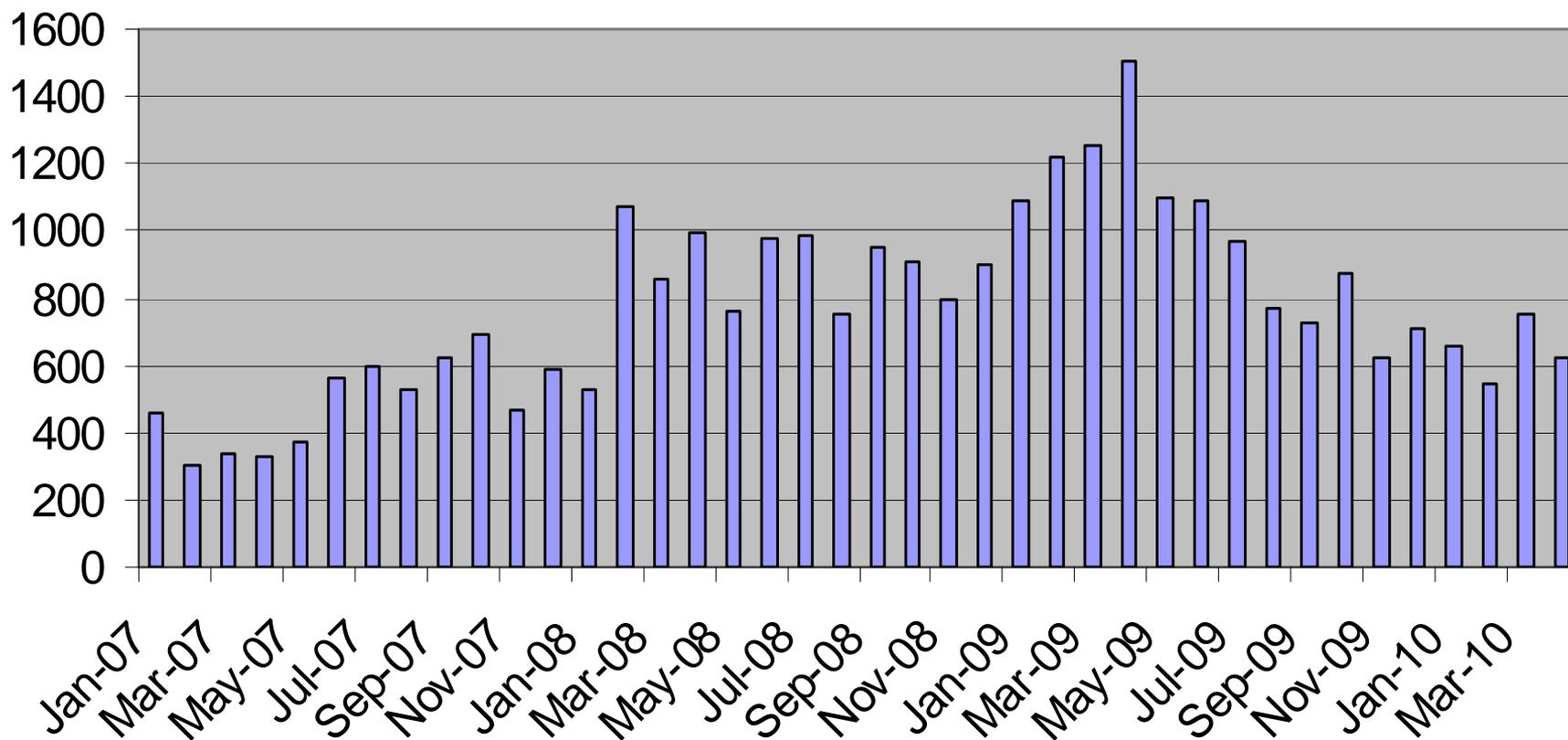
Beacon Registrations Entered 1990 to 2009





Analysis of Current RGDB

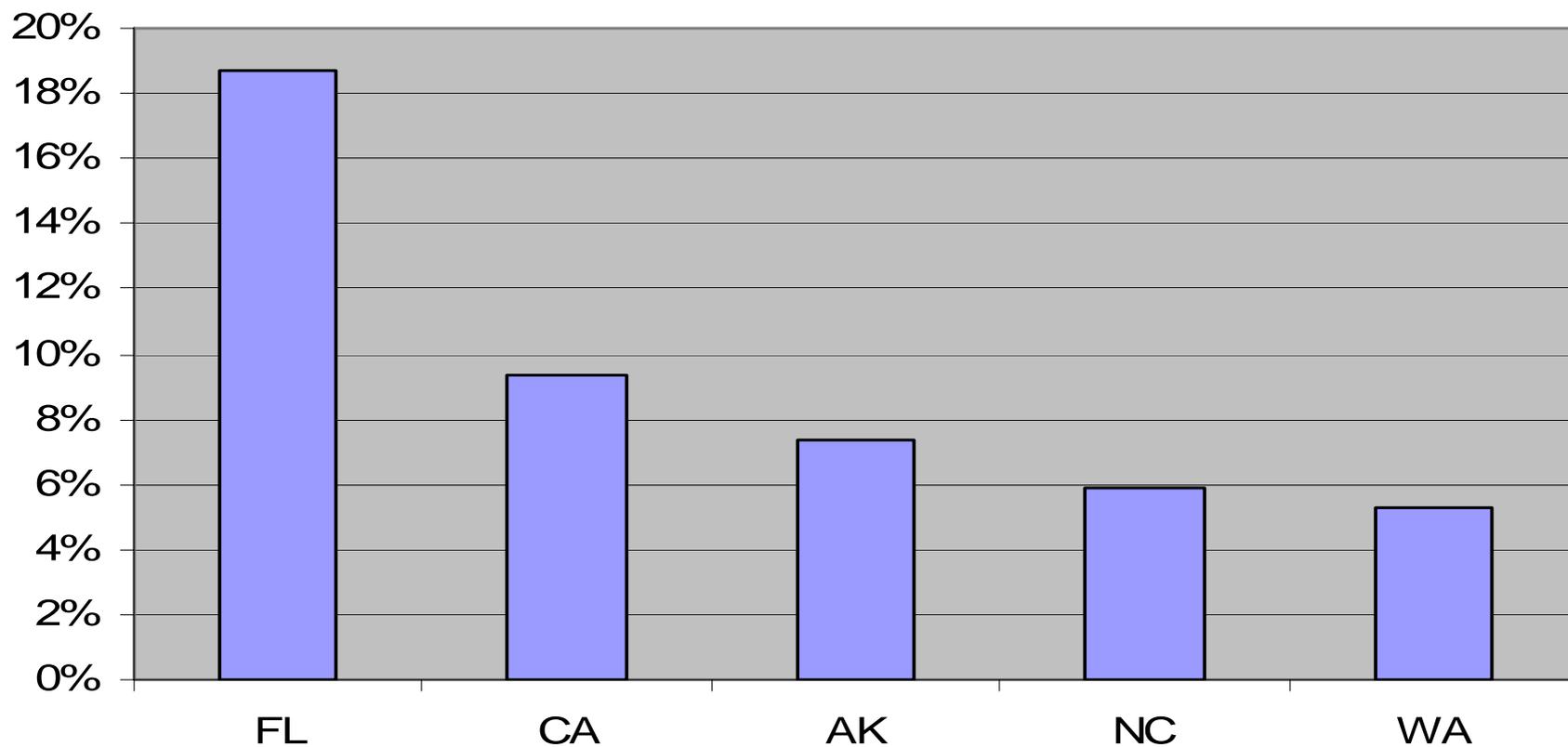
ELT Initial Registrations By Month





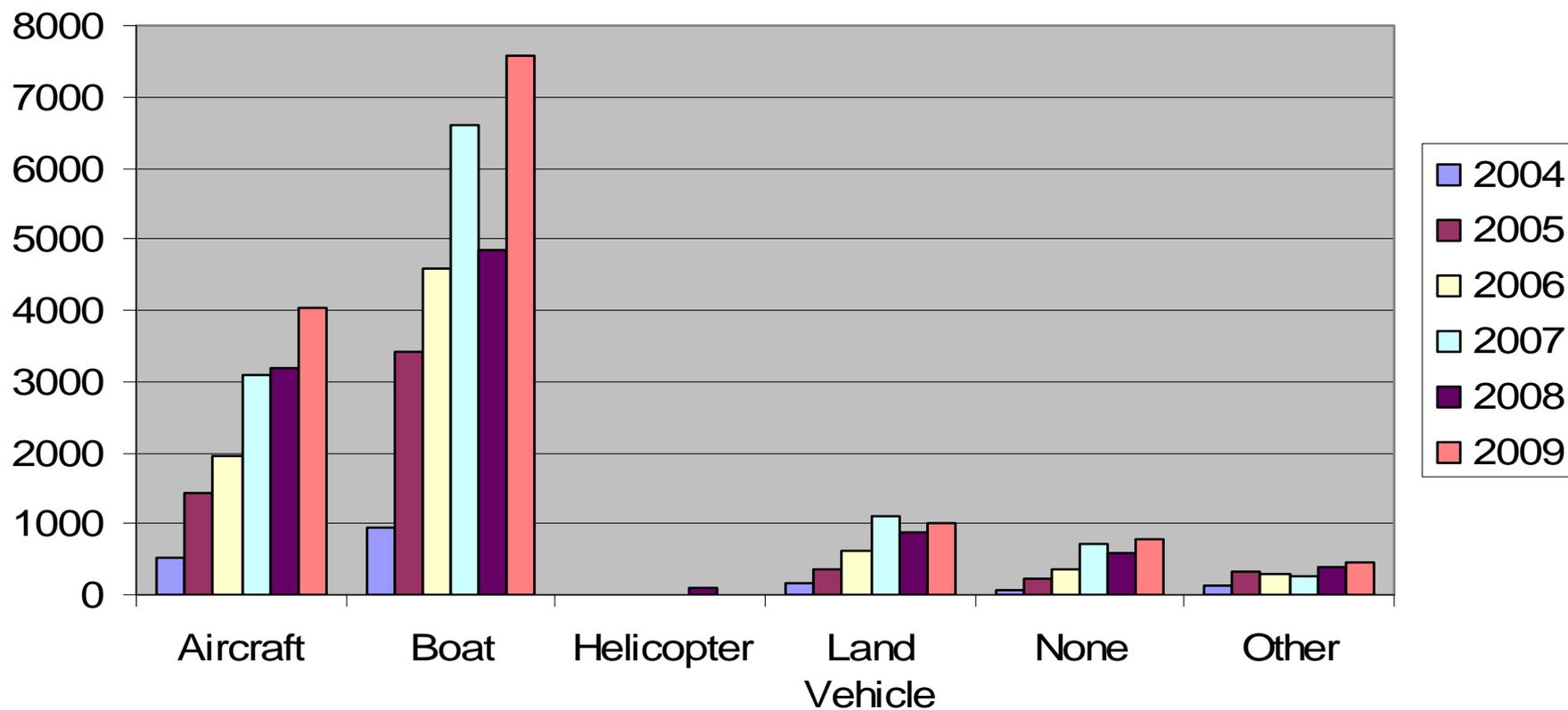
Top 5 States for PLBs By Home Address

Top 5 States for PLBs



PLB Usage

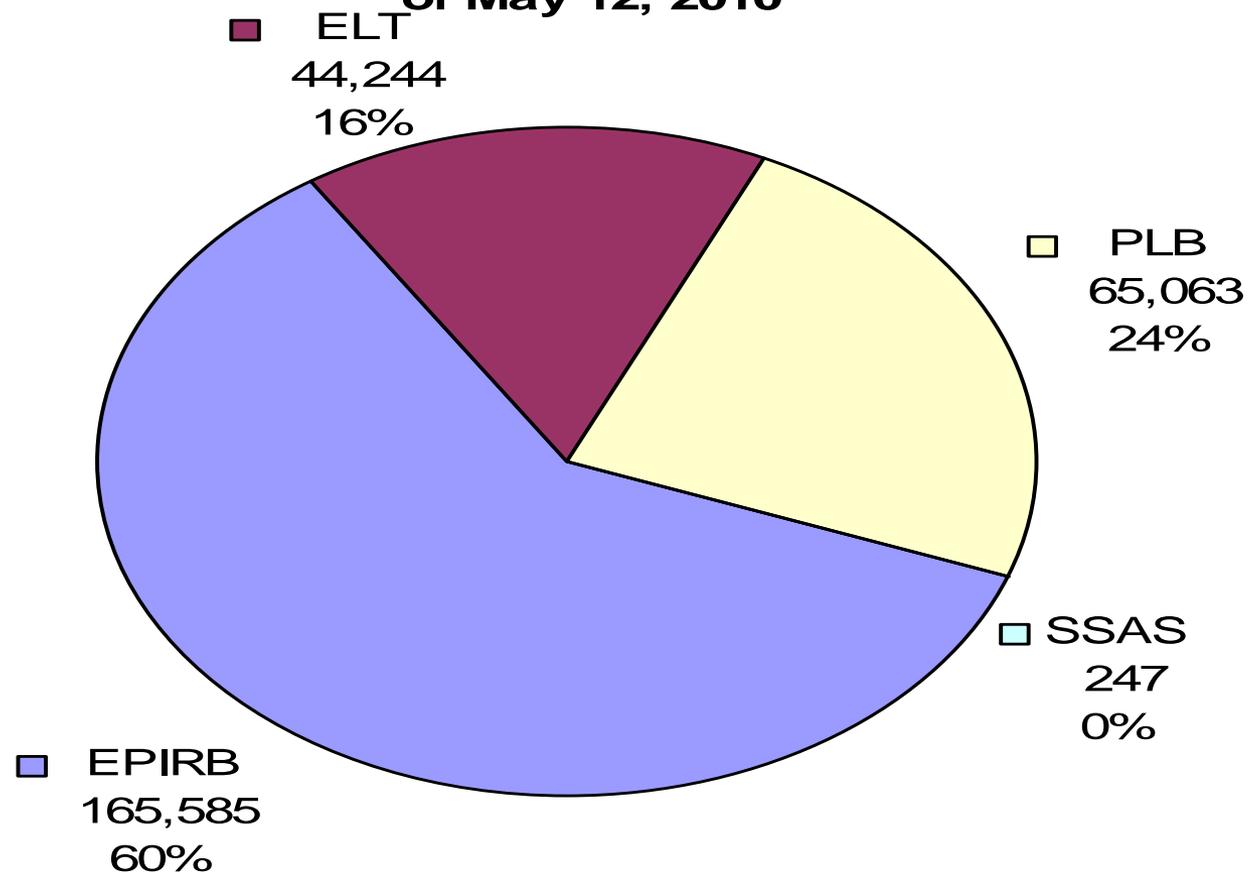
Specific Usage For PLBs





Analysis of Current RGDB

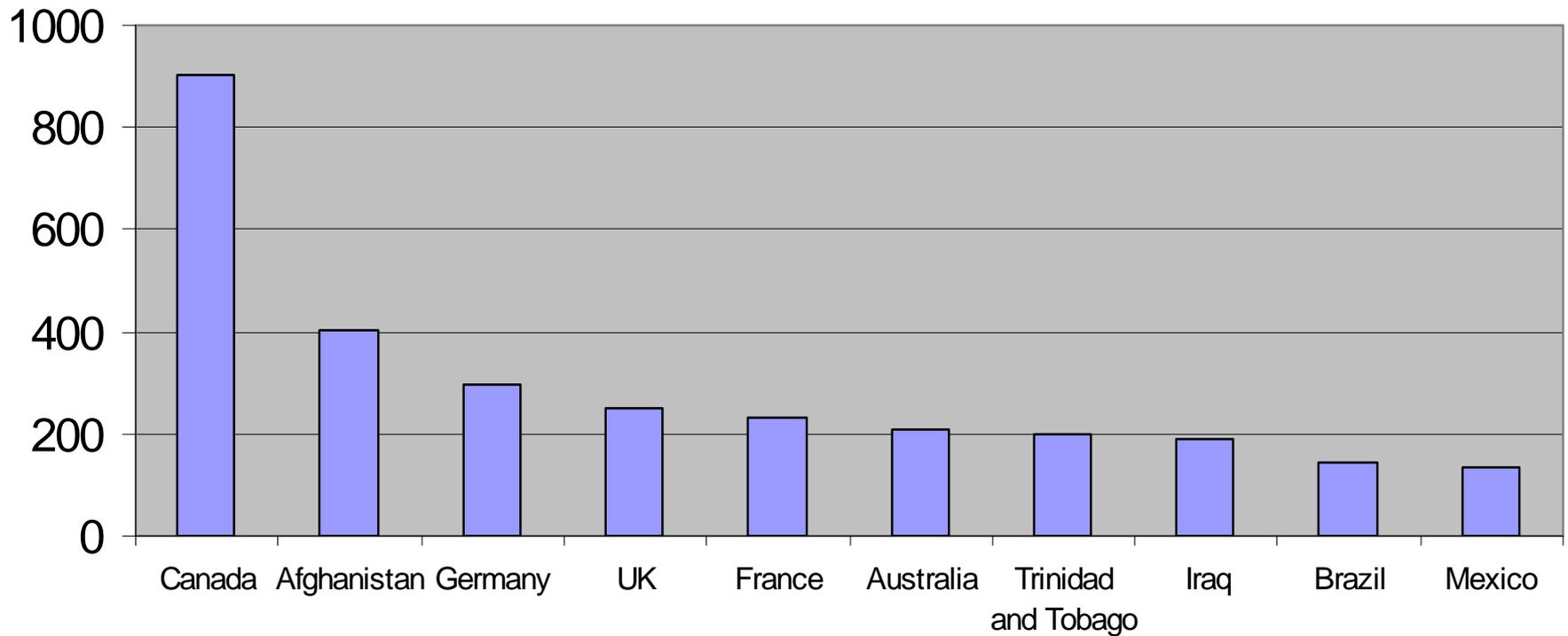
Registration Database Beacon Population Breakdown As of May 12, 2010





Non-USA Mailing Countries

**Top 10 Non-USA Mailing Countries
Initial Registrations 2007 - 2009**





RGDB Usage

Registration Usage and Accuracy
 As Reported In the IHDB
 For Period January 1, 2009 to December 31, 2009

Registration Usage

	Contributed to Case Resolution	Primary Means to Resolve Case	Total Usage	Registration Data Not Used	Total
Distress	101	53	154	21	175
Non-Distress	702	2308	3010	87	3097
Ceased	189	108	297	234	531
Total	992	2469	3461	342	3803

Measure of Usage when Registration is available: 91%

Distress: 88.0% Non-Distress: 97.2% Ceased: 55.9%



RGDB Accuracy

Registration Accuracy

	Owner Info		Contact Info		Vessel Info	
	Counts	Percentage	Counts	Percentage	Counts	Percentage
Marked As Accurate	3040	82.70%	2893	81.65%	3058	87.05%
Marked As Not Accurate	636	17.30%	650	18.35%	455	12.95%
Totals When Verified	3676		3543		3513	
Marked As Not Verified	142		268		275	
Not Marked	38		45		68	
Totals	3856		3856		3856	

Overall Accuracy when verified: 83.8%



For Registration Correspondence

SARSAT Beacon Registration
National Oceanic and Atmospheric Administration
NSOF, E/SP3
4231 Suitland Road
Suitland, MD 20746

Phone: 301-817-4515

Toll free: 888-212-7283

Fax: 301-817-4565

Email: beacon.registration@noaa.gov



Mass Mailing Efforts



- To identify cases where beacon ID registered with NOAA does not match beacon ID programmed into the unit
 - Emails and postal letters to owners of approximately 235,000 beacons
 - Check beacon ID registered with NOAA with UIN provided by manufacturer/installer
 - Check registration information



Mass Mailing Efforts Results As of 4/30/10



- 60 incorrect beacon IDs due to beacon owners' errors online
- 15 incorrect beacon IDs due to beacon owners' errors on paper
- 14 incorrect beacon IDs due to transfer of ELT to another aircraft using an electronic interface
- 11 incorrect beacon IDs due to data entry errors at NOAA
- 1 incorrect beacon ID because the manufacturer provided an incorrect ID
- 16 incorrect beacon IDs where cause was undetermined between data entry errors at NOAA or beacon owners' errors on paper



Mass Mailing Efforts Results (Typical Errors)



- Character 8 was entered rather than a B or vice versa
- Character 0 was entered rather than a D or vice versa
- Character C was entered rather than a 0 or vice versa
- Two adjacent characters were transposed when entered
- UINs of some ELTs are based on information provided by an electronic interface on the aircraft. If ELT is moved from an aircraft to an another aircraft, the UIN will change. This will lead to an incorrect registration if the ELT was previously registered.



Mass Mailing Efforts Results Continued



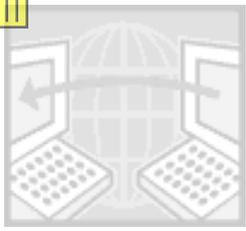
- Currency increased briefly from March 09 thru October 09 by almost 3%
- Owners are more conscientious about checking the UIN on the beacon against the ID registered with NOAA
 - Increase in unsolicited calls received indicating registered UINs are correct



Other Measures NOAA has taken



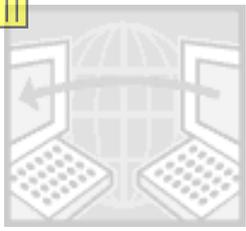
- Operational letters updated to emphasize importance of checking the beacon ID registered with NOAA is identical to the manufacturer/installed programmed UIN
- New registrations and change of ownership registrations entered by NOAA data entry personnel are also checked by other operational personnel
- Owners of beacon IDs that are questionable (i.e., not readable, incomplete, different from the manufacturer sticker) are called to verify the ID.
- Changed RGDB interface to separate the 15 character beacon ID into 3 blocks of 5 to make it more readable



Proposed Actions for Beacon Manufacturers



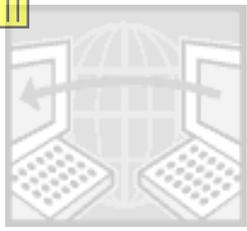
- Add a checksum
 - When a beacon is registered a check sum value is entered along with the 15 hexadecimal characters of the beacon ID. Using same algorithm as the beacon manufacturer, the RGDB calculates the check sum of the entered 15 Hex ID and compares the result to the entered checksum. If values disagree, it is assumed the user had made an error (either in the beacon identification code and/or the checksum) and re-entry continues until the two checksums agree
- Display all beacon IDs in 3 groups of 5
 - printed products
 - all labels
- Pre-printed UINs on registration forms



Suggestions On How Beacon Manufacturers Can Help



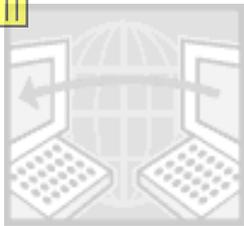
- Provide to NOAA the following:
 - Your arithmetic formula to determine correct beacon ID for an owner when an owner contacts NOAA
 - serial number calculator for various protocols you use
 - A listing of any beacons you receive from an owner which you will not return back to the same owner
 - beacons serviced
 - beacons returned



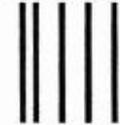
NOAA's Business Reply Permit



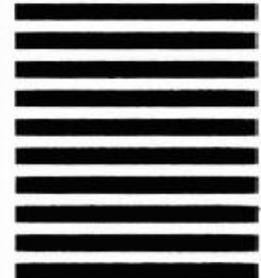
- NOAA will allow the use of SARSAT's business reply permit by manufacturers for printing envelopes for owners to return beacon registration forms to NOAA
- Manufacturers will need to print envelopes that replicate the following image
- NOAA will bear the mailing cost of envelopes sent to NOAA
- Any questions prior to use, please call LT Shawn Maddock at 301.817.3892



NOAA's Business Reply Envelope Sample



**NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES**



BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 7411 SUTLAND, MD

POSTAGE WILL BE PAID BY ADDRESSEE

**SARSAT BEACON REGISTRATION
NOAA
NSOF, E/SP3
4231 SUTLAND RD
SUTLAND, MD 20746-9900**





Suggestions On How Beacon Manufacturers Can Help



- Contact NOAA immediately when an issue arises which has a direct impact on beacon owners
 - Duplicate beacon ID encoded into beacons
 - Mislabeling of beacon IDs on forms or beacons
 - Any recalls you may have for beacons you have manufactured

- Manufacturers and Service Centers verify NOAA decal currency and remind the owner, if appropriate, to update the beacon's registration with NOAA

- Inform owners who have vessel information, tail number, MMSI, and radio call sign, encoded into beacon of the importance of recoding the beacon and updating the registration when the beacon is swapped from one vessel to another vessel or swapped from one aircraft to another